

SMALL GRAINS

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
Preemergence — Wheat				
diclofop methyl at 0.75 to 1.0 lb/A	2.0 to 2.67 pt of Hoelon 3 EC in at least 10 gal water for ground and 5 gal water for air.	After seeding.	Annual ryegrass.	Do not apply preemergence to other small grains. In coarse-textured soils with less than 2% organic matter use the low rate. Use the higher rate for fine-textured soils with more than 2% organic matter. Use high rate if ryegrass pressure is heavy irrespective of soil type or organic matter. See postemergence Hoelon entry below for additional restrictions.
Preemergence — Wheat, Barley				
chlorsulfuron + metsulfuron at 0.017 to 0.042 lb/A	Finesse 75DF – 0.2 to 0.5 oz/acre in 10 gal water minimum by ground or 1 gal by air. Add surfactant at 0.25% v/v.	At planting.	Most winter annual broadleaves, garlic. Suppresses diclofop-resistant ryegrass at high rate.	See label for tank mixing. Plant only STS soybeans the year after application.
Postemergence — Oats, wheat, rye, and barley				
2,4-D at 1.0 lb/A	2,4-D amine salts or 2,4-D low-volatile ester. Use 1 qt (4 lb/gal formulation) in 5 to 10 gal water for air and in 10 to 20 gal of water for ground application. Add 1 pt surfactant for each 50 gal of spray mix.	During warm sunny weather immediately after winter dormancy and before grain begins to joint. In most years, this period occurs in February.	Most broadleaf weeds and suppression of wild garlic and/or onions.	Use the low-volatile ester formulation where wild garlic and/or onions are a problem. Follow label precautions carefully. When applied with liquid nitrogen, use 0.5 quart per acre. Mix low-volatile ester directly; dilute amine form with 3 to 5 parts water before mixing.
dicamba + 2,4-D at 0.125 + 0.50 lb/A	Clarity — 0.25 pt. plus 1.0 pt (4 lb/gal for mulation) of 2,4-D amine or low-volatile ester in 5 gal water for air and in 10 to 20 gal water for ground application. Add 1 pt surfactant for each 50 gal spray mix.	Same as above.	Same as above. Garlic and/or onions.	Same as above. The low-volatile ester formulation should be used where wild garlic and/or onions are a problem. See label for injury precautions.
Postemergence — Wheat				
diclofop methyl at 0.5 to 1.0 lb/A	1.33 to 2.67 pt Hoelon 3EC in at least 10 gal water and a minimum of 40 psi for ground; 5 gal water by air. Surfactant not needed.	When ryegrass is in the 1- to 2- tiller stage.	Annual ryegrass.	If ryegrass is in the 5-leaf to 2-tiller stage, use high rate. Do not mix with other pesticides or liquid fertilizer. Do not graze treated fields or feed treated forage to livestock. Broadleaf herbicides should not be applied within one week of Hoelon application. Do not make more than 1 application per season. Activity is slow. Do not make aerial application when wind is above 5 mph or within 100 feet of lake, pond, stream, drainage basin, or tidal marsh.

Consult labels for approved adjuvants.

Weed resistance to recommended use-rates of certain herbicides has been documented in Mississippi — SEE PAGE 4.

Small Grains, Continued

Crop, weed, or situation and active chemical per treated land acre	Formulation needed to treat 1 acre broadcast	Time of application	Weeds controlled	Special instructions and remarks
Postemergence — <i>Wheat</i>				
mesosulfuron-methyl	Osprey - 4.75 oz/A in at least 10 gal/A of water by ground or 5 gal/A of water by air.	From wheat emergence through jointing. Ryegrass control normally best with fall application.	Annual ryegrass, Annual bluegrass.	For best ryegrass control, apply on 1-leaf to 2-tiller stage ryegrass, when it is actively growing. Application of OSPREY must include one of these two suggested adjuvant systems: a high-quality MSO with 10% emulsifier or greater at a rate of 1.5 pt/A of MSO, or a nonionic surfactant at 0.5% v/v, plus either AMS (2-3 lb/A) or UAN (1-2 qt/A).
Postemergence — <i>Wheat, Barley</i>				
tralkoxydim at 0.24 lb/A	Achieve 40 DG — 0.6 lb/acre in minimum of 10 gal water by ground or 5 gal by air. Add surfactant at 0.5% v/v	Postemergence.	Annual ryegrass in 1-to 4-leaf stage actively growing.	Do not apply more than 0.6 lb/A/season. See label for tank mixing.
Postemergence — <i>Wheat, Oats, Rye</i>				
prosulfuron 0.0178 lb/A	Peak 57 WDG — 0.5 oz/A in a minimum of 2 gal of water by air or 10 gal by ground. Add 1 pt nonionic surfactant for each 50 gal spray mix.	Over-the-top to wheat or oats from 3-leaf to internode elongation.	Most winter annual broadleaves, garlic.	See label for rate to use on weed height. See label for tank mixtures with dicamba. See label for restrictions. Do not plant cotton or non-STS soybeans for 10 months after application.
Postemergence — <i>Wheat and Oats</i>				
thifensulfuron + tribenuron at 0.014 to 0.028 lb/A	Harmony Extra 75DF — 0.3 to 0.6 oz in 2 to 5 gal water for air and in 10 to 20 gal water for ground application. Add 1 pt surfactant for each 50 gal spray mix. Do not exceed 0.4 oz on oats.	When wheat and oats are 2-leaf but before "boot stage."	Garlic, curly dock, winter annual broadleaves.	Apply to provide excellent coverage of weeds. Several hours of dry weather are needed to allow absorption by foliage. Garlic should be treated in spring when actively growing. Do not mix with Hoelon. Application with liquid nitrogen may increase crop injury. Do not harvest sooner than 45 days after the last application.
Postemergence — <i>Wheat Barley, Oats</i>				
thifensulfuron-methyl	Harmony GT — 0.3 - 0.6 oz/A. Add 0.25 - 0.5% v/v surfactant unless specified otherwise in tank mixtures. Use 2 to 5 gal/A by air or 10 to 25 gal/A by ground application.	After crop is in the 2-leaf stage, but before the flag leaf is visible.	Most winter annual broadleaves, curly dock, wild garlic.	Control is enhanced when applications are made during warm temperatures to actively growing weeds. 0.5 to 0.6 oz/A are recommended for wild garlic control. Do not tank mix with Hoelon or Malathion.
Preharvest — <i>Wheat</i>				
glyphosate 0.37 to 0.75 lb/A	Glyphosate 4/5 lb/gal — 16 to 32/9.5 to 19.2 oz/A in 3 to 10 gal water by air or in 10 to 20 gal water by ground.	After wheat has 30% or less moisture and at least 7 days before harvest.	Annual broadleaf and grass weeds, johnsongrass, marestail.	Do not use on wheat grown for seed. Avoid drift to nearby crops that are not Roundup resistant.